INTRODUCTION

Achieving high productivity and quality standards is a challenge for many organisations. In so far as productivity is concerned, attempts have been made to transfer various management concepts that are successful in improving productivity in the manufacturing industry to the construction industry to help raise its productivity level. One such example is the Just-In-Time (JIT) philosophy that originated in Japan. Lim and Low (1992) examined the use of the JIT philosophy in the context of materials management and found that better procurement and co-ordination of materials on site can be achieved with a JIT system in place. Application of the JIT principles for process layout in precast concrete production and for site layout have also been examined by Low and Chan (1996) and Low and Mok (1999) respectively.

In the United Kingdom, the JIT philosophy was examined for building materials management (Akintoye 1995) as well as for housebuilding (Bates, Sturges & McGowan 1999; Naim, Naylor & Barlow 1999). In Denmark, Bertelsen (1995) reported an increase in productivity for a social housing project that experimented with the use of the JIT philosophy in building logistics. In the United States, Howell (1999) propounded the use of the JIT philosophy for lean production in the construction industry. Tommelein (1998) and Tommelein and Li (1999) examined the application of JIT principles for pipe-spool installation and concrete deliveries respectively.

Despite some reservations (Green 1999), studies on the application of JIT principles in the construction industry appear to be gaining momentum in several countries. Such studies seem to suggest that the application of JIT principles can be generic enough to accommodate for different behavioural and cultural contexts outside of Japan where its origin lies.